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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,472	06/28/2001	Bernard Y. Malo	AVAN/000419	3302
47389 7590 05/31/2007 PATTERSON & SHERIDAN, LLP 3040 POST OAK BLVD SUITE 1500 HOUSTON, TX 77056			EXAMINER WONG, TINA MEI SENG	
			ART UNIT 2874	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/892,472

Applicant(s)

MALO, BERNARD Y.

Examiner

Tina M. Wong

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-8 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-8 and 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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DETAILED ACTION

This Office action is responsive to Applicant's response submitted 15 March 2007.

Election/Restriction

Applicant's election without traverse of Group II in the reply filed on 15 March 2007 is acknowledged.

Allowable Subject Matter

The indicated allowability of claims 6-8 is withdrawn in view of the newly discovered reference(s) to U.S. Patent 6,221,566 to Kohnke et al. Rejections based on the newly cited reference(s) follow. This action is **not** made final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8 and 14-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,221,566 to Kohnke et al.

In regards to claims 6 and 8, Kohnke et al teaches a method of altering an optical waveguide to achieve a desired optical signal response from the waveguide including the steps of inducing an increase in the refractive index in a portion of the waveguide and heating a localized section of the portion to stabilize the section. But Kohnke et al fails to specifically teach measuring the optical signal response from the waveguide. However, it is common knowledge in the art to measure the optical signal response from the waveguide in order to determine the

output of the signal in order to confirm the desired output is received and relay that signal to another device. Furthermore, Kohnke et al does not specifically teach heating a section to reduce the increase in the section and repeating the measuring and heating step until the desired optical signal response is achieved. However, since the prior art method of heating/annealing is the same step as claimed by Applicant, it would yield the same result of reducing the increase in the section. Additionally, the prior art method achieves the desired optical characteristics after the step of increasing the refractive index and stabilizing the section and therefore reads on claim 1.

In regards to claims 18 and 20, Kohnke et al teaches a member configured to induce an increase in the refractive index in a portion of the waveguide and a heating member configured to heat a localized section of the portion to reduce the increase in the section. But Kohnke et al fails to specifically teach a measurement member configured to measure the optical signal response from the waveguide. However, it is common knowledge in the art to use a measurement member to measure the optical signal response from the waveguide in order to determine the output of the signal in order to confirm the desired output is received and relay that signal to another device. Furthermore, Kohnke et al does not specifically teach heating a section to reduce the increase in the section and repeating the measuring and heating step until the desired optical signal response is achieved. However, since the prior art method of heating/annealing is the same step as claimed by Applicant, it would yield the same result of reducing the increase in the section. Additionally, the prior art method achieves the desired optical characteristics after the step of increasing the refractive index and stabilizing the section and therefore reads on claim 1. Lastly, the claim language “configured to” only requires the ability or capability of performing or accomplishing the task and is not a positive limitation.

In regards to claims 7, 14, 15, 19, 21 and 22, Kohnke et al teaches the heating to be accomplished by using a CO₂ laser. Although Kohnke et al does not specifically teach the heating to be accomplished by using light absorbed at a surface of the waveguide to produce localized heat, Kohnke et al does teach the heating to be accomplished by the same source, a CO₂ laser. Since the same source is taught by Kohnke et al and claimed by Applicant, and the claim language “heating accomplished by...” only requires the laser to be capable of performing or accomplishing the task. Therefore, although not explicitly stated, it would have been obvious at the time the invention was made to a person having ordinary skill in the art that Kohnke et al does teach a CO₂ laser capable of accomplishing the task claimed.

In regards to claims 16, 17, 23 and 24, Kohnke et al teaches the inducing to be accomplished by using a UV light source and placing a phase mask between the UV light source and waveguide to produce a grating in a portion of the waveguide.

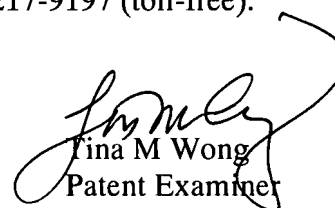
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Wong whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tina M Wong
Patent Examiner